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A STUDY OF SMEs IN THE TEXTILE INDUSTRY (NACE 43)

Eurostat has undertaken a study of the textile industry (the production and finishing of cloth, the manufacture of hosiery, carpets etc) in several EC countries between 1980 and 1989.

The study also includes comparisons with the United States and Japan.

The economic difficulties experienced by the industry in this period led to a restructuring based on smaller enterprises. In the countries studied this resulted in better economic performance.

THE 1980s - A DIFFICULT ECONOMIC CLIMATE

There was a marked recession in the textile industry up to 1983, followed by a slight upturn (Fig 1).

Between 1980 and 1989 total output increased by 1.5% in volume compared with 12% in manufacturing industry as a whole.

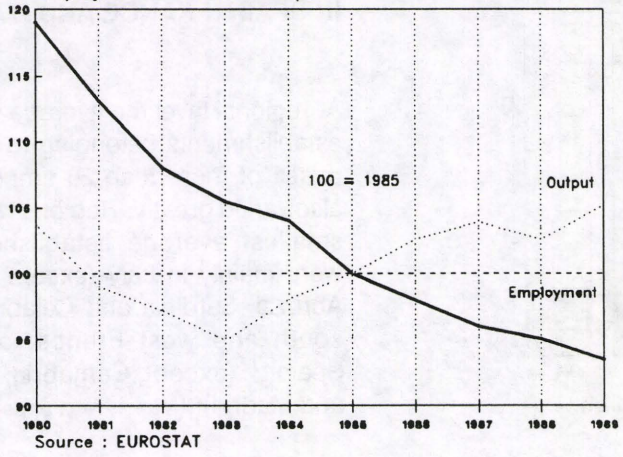
Unemployment increased significantly in the 1980s. By 1989 the industry employed approximately 420,000 fewer people than in 1980, a fall of 21%.

The marked recovery in output between 1983 and 1987 was due partly to an increase in exports to Japan and to the non-industrialised countries. Indeed, 1984 to 1986 showed a trade surplus with non-EC countries.

After a return to deficit in 1987 there was another slight improvement in the balance in 1988 to 1989 (Fig 2).

Fig 1

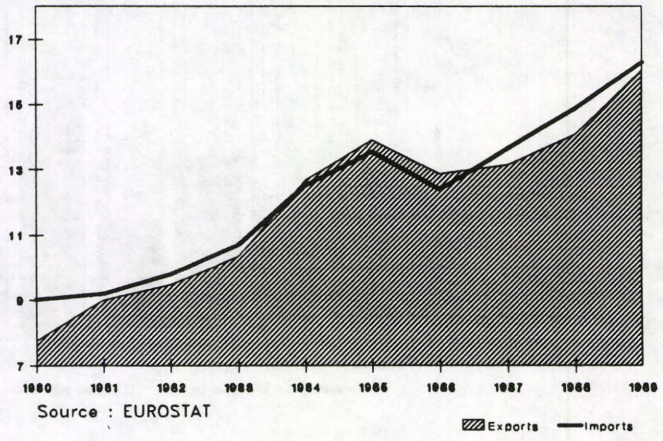
Textile industry (NACE 43)
Employment and volume output



Source : EUROSTAT

Fig 2

Textile industry (NACE 43)
Trend in trade with non-EC countries
(ECU '000)



Source : EUROSTAT

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SMEs EMPLOY 60% OF TEXTILE INDUSTRY WORKFORCE

In 1988 there were 78,000 enterprises throughout the EC involved in textile production. Of these, 58,000 employed fewer than 10 people (micro-enterprises); well over half were in Italy (23,000) and Spain (17,000).

In the same year the number of people employed in textile enterprises in the Community averaged 21. This average is small compared with Japan (38 employees) and especially the US (120, excluding the self-employed).

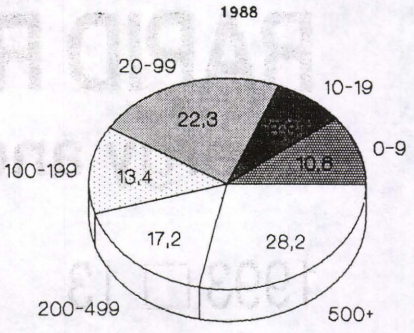
In the Community SMEs, using the strict definition of 10 to 500 employees, were in the majority. However, in the US the industry was based mostly on large enterprises.

Micro-enterprises in the EC accounted for 11% of the workforce in the textile industry and 10% of the turnover. In the US micro-enterprises employed less than 2% of the workforce, excluding the self-employed.

In the EC small enterprises (10 to 99 employees) and medium enterprises (100 to 499 employees) each accounted for 30.6% of employees in the textile sector (**Fig 3a**). Small enterprises produced 32% of total turnover while medium enterprises produced 30%. Together small and medium enterprises in the US employed only approximately 30% of the workforce in this sector.

Finally, in the EC large enterprises (more than 500 people) employed 28% of the workforce. They accounted for 27% of sales, 10% of which were generated by the 10 largest enterprises.In the US large enterprises employed 69% of workers. Five of the world's eight largest textile groups (including those producing synthetic fibres) were based in Japan: Asahi Chemical Industry, Toray Industries, Kanebo, Teijin and Toyobo.

Fig 3a
Textile industry (NACE 43) EUR 12
Breakdown of Community enterprises by size



Source : EUROSTAT

LARGER ENTERPRISES PREDOMINATE IN GERMANY, FRANCE, UK AND PORTUGAL

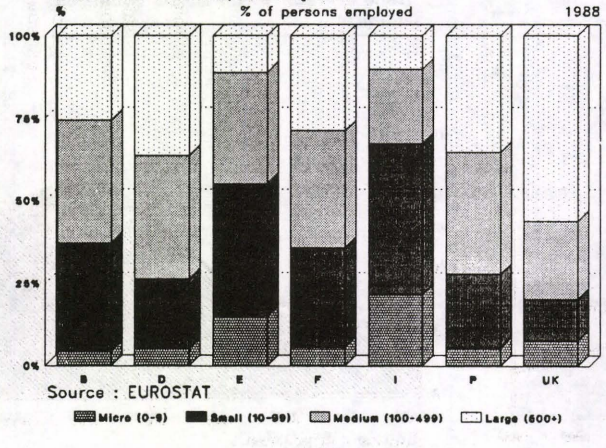
In Europe company size varied greatly from one country to another (**Fig 3b**).

Over two-thirds of the total workforce in Italy and over half in Spain were in enterprises of fewer than 100 people. Micro-enterprises alone accounted for 21.5% and 15% of the workforce respectively. They were also important in Iceland and Finland, accounting for 17% and 12%.

At the other end of the scale enterprises of more than 100 people employed three-quarters of the workforce in the UK, Germany and Portugal. In the UK large enterprises predominated, employing 56%. The three major UK textile companies - Coats Viyella, Courtaulds and Total- accounted for approximately a third of the workforce and a fifth of the turnover.

In France the industry was also highly concentrated. The three largest companies - Chargeurs, DMC and Prouvost - employed 27% of the workforce and generated the same percentage of turnover.

Fig 3b
Textile industry (NACE 43)
Breakdown of enterprises by size

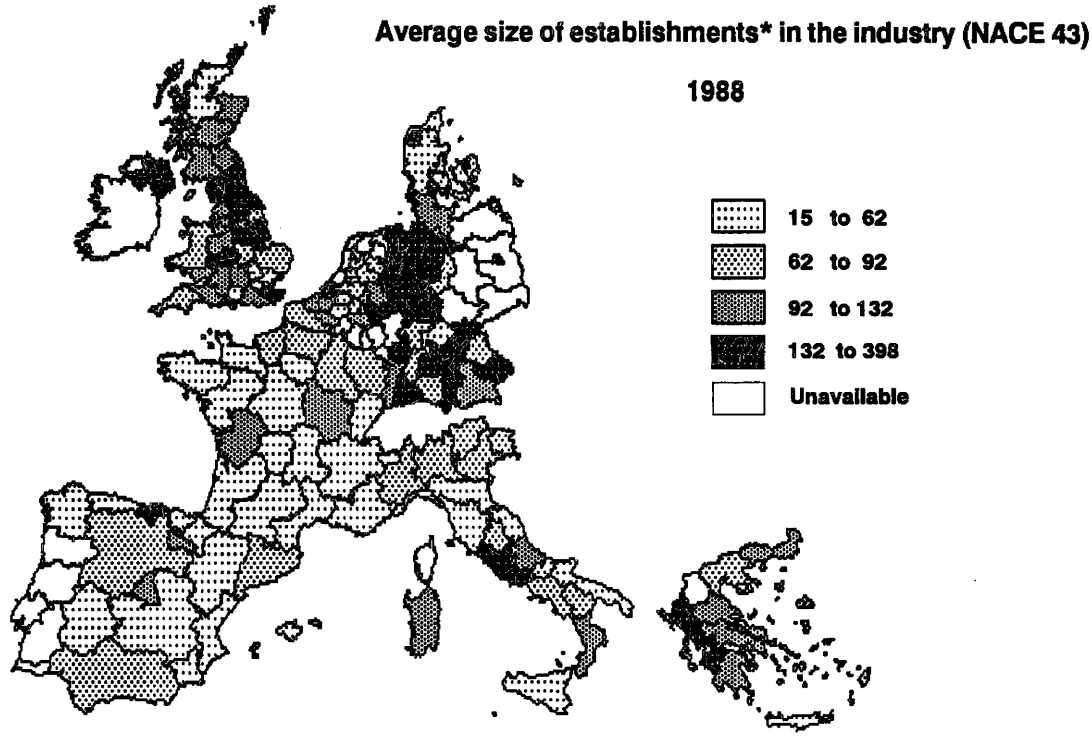


Source : EUROSTAT

AT REGIONAL LEVEL - ESTABLISHMENTS SMALLER IN SPAIN, FRANCE AND ITALY

At regional level the average size of establishments belonging to enterprises of more than 20 employees also varied greatly. Regions with the smallest average establishments were mainly in Italy (except Lazio, Abruzzi, Sardinia and Calabria); in south and west France; and in Spain[2] (except Cantabria, Rioja and Madrid). **(Map 1, next page)**

Map 1



* Establishments belonging to enterprises with more than 20 employees.

SMES LESS SPECIALISED (see methodology[1])

Looking at the whole textile and clothing production process, it can be seen that large enterprises tended to concentrate on upstream activities, such as manufacture of synthetic (NACE 26) or natural fibres, spinning and weaving.
On the other hand, micro-enterprises were more likely to concentrate on downstream activities such as clothing and textile goods (NACE 45, except NACE 453), especially bespoke tailoring.

In the five countries studied in this context - Spain, France, Italy, Luxembourg and Portugal - SMEs occupied the middle ground (Fig 4). They were more or less evenly distributed among the various stages of production.

SMALL ENTERPRISES - GROWING SIGNIFICANCE...

From the early 1980s small enterprises with more than 20 employees increased their share of both employment and turnover in all countries studied. This trend was particularly pronounced in Italy and France (Fig 5a). It is remarkable that this took place in the context of strong growth in turnover generated

(1) Eurostat estimates

Fig 4

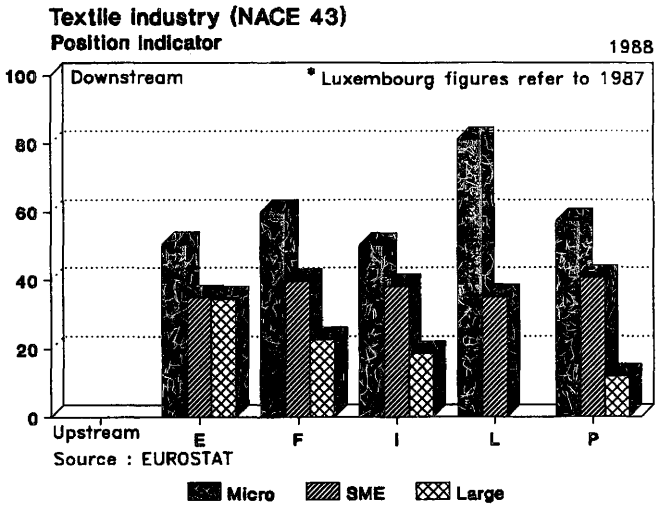
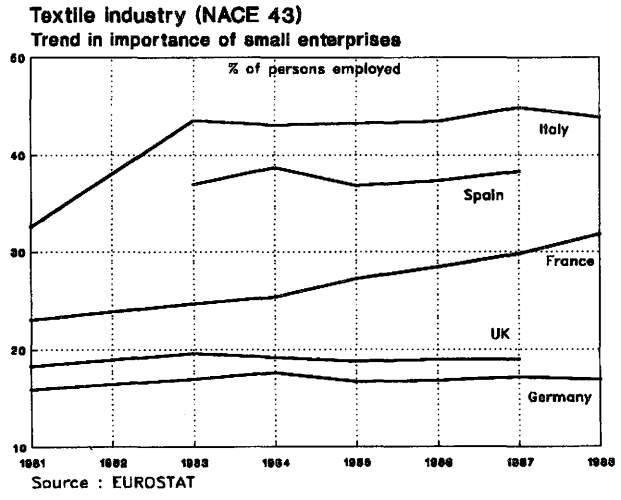


Fig 5a



by exports. Normally large enterprises are generally better equipped to break into foreign markets.

In 1989 intra-Community trade represented 29% of total turnover[2] of small enterprises with more than 20 employees, compared with 21% in 1980. Exports to non-Community countries were 16% as against 13%.

...BUT DECLINE IN THE WORKFORCE

In France the advance of small enterprises at a constant rate of little more than 1% a year was due to a relatively less pronounced decline in their workforce. Indeed, in 1988 small enterprises employed 2,000 fewer workers than in 1980.

Medium-sized enterprises, which gained ground at a slower rate, shed 40,000 jobs. Large companies were in decline and shed 47,000 workers in this period and some failed completely (**Fig 5b**).

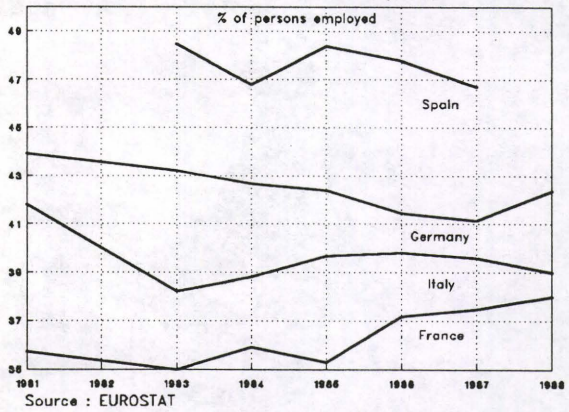
This explains the 10% increase in sales by small enterprises in France from 1980 to 1989.

In the UK and Germany, the advance of small enterprises was less pronounced.

In Germany and Spain, medium-sized enterprises lost ground slightly to large enterprises.

Fig 5b

Textile industry (NACE 43)
Trend in importance of medium-sized enterprises



Source : EUROSTAT

PRODUCTIVITY DOES NOT ALWAYS INCREASE WITH SIZE

Excepting Italy, the curve of apparent labour productivity (per capita turnover) by size in the textile sector differed from most other industries (**Fig 6**).

In France and Belgium, micro and small enterprises were more productive than large ones. In the UK small enterprises were more productive than large ones.

SIGNIFICANT MAJORITY OF SINGLE-ESTABLISHMENT ENTERPRISES

The proportion of single-establishment enterprises can be estimated by collating data for enterprises with data for establishments (**see Methodology 2**).

The minimum estimated percentage of enterprises (more than 20 employees) with only one establishment was 98% in Italy, 91% in Belgium, 84% in Denmark, 63% in the UK and 37% in France. For all sizes of enterprise the percentages rose to 76% in France, 94% in the UK and almost 100% in the other countries. This assumes all enterprises with fewer than 20 employees were single-establishment enterprises.

METHODOLOGICAL NOTES

[1] **Position indicator:** the weighted average of the percentage of the workforce at each stage of the production process. The weightings decrease gradually from the upstream sectors to the downstream ones.

[2] **Estimation of single-establishment enterprises**: assuming enterprises have either one or two establishments, the estimates are based on the following equations:

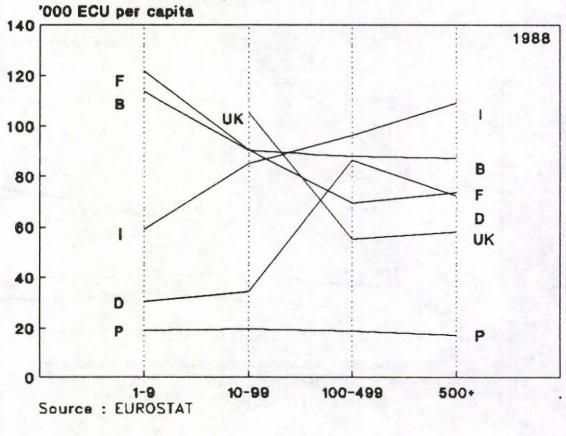
$$eu + ep = Ten$$
$$eu + 2ep = Tet$$

where:

eu = number of single-establishment enterprises
ep = number of enterprises with more than one establishment
Ten = total number of enterprises
Tet = total number of establishments.

Fig 6

Textile industry (NACE 43)
Per capita turnover by size class
'000 ECU per capita



Source : EUROSTAT

(2) of enterprises with more than 20 employees.

A more detailed study was made of France, the United Kingdom and Belgium based on samples of 1 474, 426 and 394 enterprises respectively.

The size-class, workforce and turnover profiles of the samples tallied exactly with those in the annual survey of the structure and activity of industry .

Capital intensiveness

The inverted nature of the apparent labour productivity curve in the UK and Belgium seems to be linked to that of capital intensiveness, which, unlike most industries, falls with the increase in size (Fig. 7).

Fixed assets

In Belgium the fixed asset ratio (gross tangible fixed assets/gross assets) - in general significantly higher than in the other countries (Fig 8) - was, like capital intensiveness, higher for very small enterprises than for the others. In France and the UK the fixed asset ratio increased with size, as in most other industries.

Returns to scale

In all three countries returns to scale were slightly below 1 and therefore slightly diminishing: 0.93 in France, 0.91 in the UK and 0.96 in Belgium.[3] Enterprises with between 10 and 19 employees thus had the highest marginal labour and capital productivity.

Fig 7
Textile industry (NACE 43)
Capital intensiveness, 1990

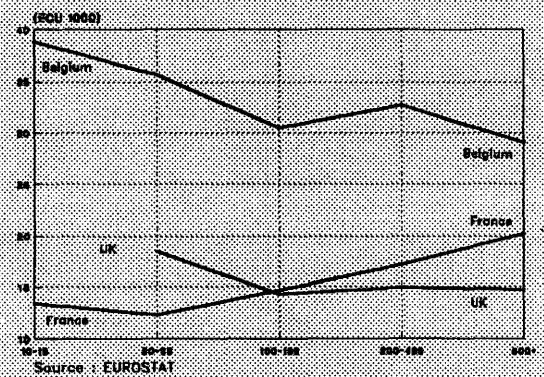


Fig 8
Textile industry (NACE 43)
Fixed assets, 1990

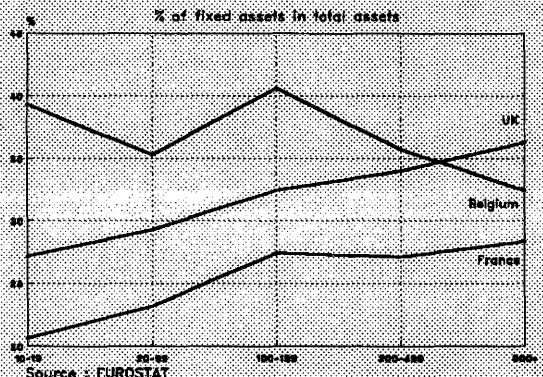


Fig 9
Textile industry (NACE 43)
Per capita labour costs, 1990

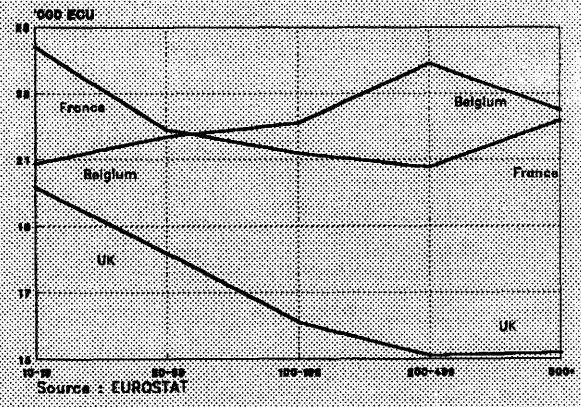
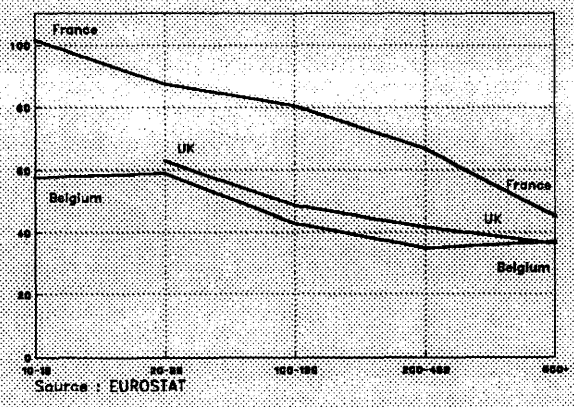


Fig 10
Textile industry (NACE 43)
Economic efficiency, 1990



(3) Returns to scale are calculated using a CES-type production function ($Y = AK^{\alpha}L^{\beta}$), this being the sum $\alpha+\beta$ of the marginal elasticities of employment and fixed assets.

Labour costs

In France and the UK average remuneration followed the same curve as marginal labour productivity and fell with the increase in size (**Fig 9, preceding page**). In Belgium the curve rose, as in most other industries.

Economic efficiency

In terms of economic efficiency (GOS[4]/net fixed assets), the optimal size for all three countries was that of the most productive enterprises, ie very small enterprises with between 10 and 19 employees (**Fig. 10, preceding page**).

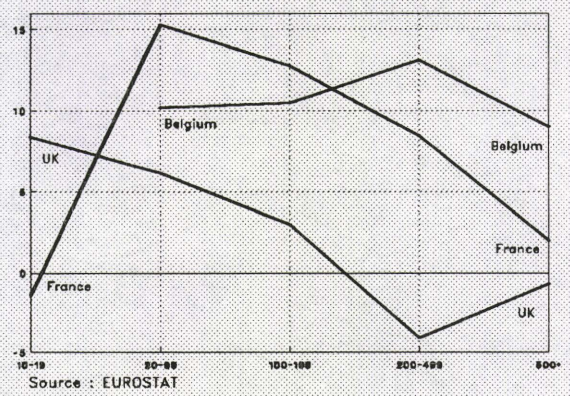
Financial efficiency

In contrast, in terms of financial efficiency (current pre-tax profits/equity), the optimal size varied, but in all three countries was lower than 500 employees (**Fig 11**).

In Belgium the very small enterprises were the most efficient (with a return of 8%); in France, it was the next size class up, ie enterprises with between 20 and 99 employees (15%); and in the UK enterprises with between 200 and 499 employees (13%). These variations are partly explained by the different capital structures of the size classes in each country. UK SMEs appear to be more highly capitalized than Belgian enterprises, and especially French enterprises. The proportion of equity was approximately 45% in the UK, 40% in Belgium and 35% in France (**Fig 12**).

Fig 11

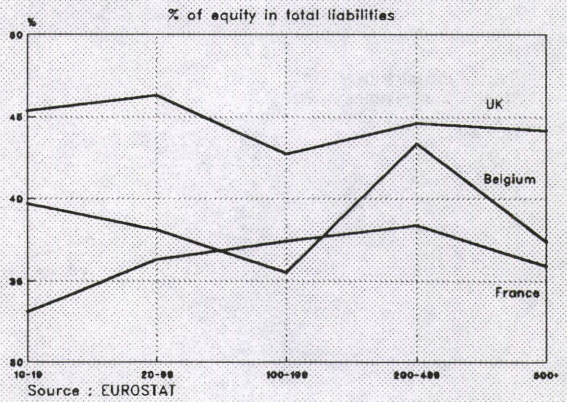
Textile Industry (NACE 43)
Financial efficiency, 1990



Source : EUROSTAT

Fig 12

Textile Industry (NACE 43)
Equity, 1990



Source : EUROSTAT

(4) gross operating surplus

The structural data on SMEs in 1988 and 1989 were drawn from figures presented and analysed in "Enterprises in Europe, 2nd Report", Eurostat, 1992.

The current data and the regional data were taken from the annual coordinated survey of the structure and activity of industry and are also published in "The Structure and Activity of Industry, Breakdown by Size of Enterprise", Theme 4 Series C, Eurostat.

The analysis in pages 5 and 6 is based on estimates produced by Eurostat.

Table 1
General data, 1988 and 1989.

	Number of enterprises		Total employment or employees (see notes)		Turnover (ECU millions)		% of employment in 1988			
	1988	1989	1988	1989	1988	1989	Micro (0-9)	Small (10-99)	Medium (100-499)	Large (500+)
EUR 12 (estimates)	78500	:	1619000	:	128287	:	11	31	30	28
Belgium [a - c]	1897	1863	56153	55505	5078	5368	3	33	38	26
Danmark [a - b]	423	400	13518	13094	:	:	6	:	:	:
Germany	6074	:	225212	:	18849	:	3	22	38	37
Greece [a - d]	823	816	56179	54426	2279	2246	:	38	37	25
Spain [c]	17165	18464	157050	154216	:	:	9	43	36	12
France	5821	:	198359	:	15700	:	6	30	35	29
Ireland [a - e]	182	:	10505	:	588	:				
Italy	23230	:	394997	:	33361	:	22	46	22	10
Luxembourg	:	:	:	:	:	:				
Netherlands [a - b]	487	:	20771	:	1972	:	4	:	:	:
Portugal [c]	7755	8394	173153	170373	3216	3257	3	23	37	37
United Kingdom [a]	9877	10749	272924	261321	26221	25546	8	13	23	56
Iceland	56	50	960	810	:	:	17	17	66	:
Norway [a - b]	253	209	5667	4881	:	:	10	53	37	:
Austria	1278	:	41174	:	2623	:	7	24	34	35
Finland	1306	1366	15549	14918	857	881	12	28	60	0

Source : EUROSTAT

: Data not available

a Different unit for enterprise: Belgium - employer, Denmark - legal unit, Greece, Irland and Norway - establishment, Netherlands - economic activity unit, UK - VAT unit.

b No enterprise or employment data for zero-employee level.
Employment in micro-enterprises underestimated.

c Enterprise data for zero-employee level, but no employment data.
Employment in micro-enterprises underestimated.

d No enterprise or employment data for micro-enterprises.
Micro-enterprises not calculated.

e No enterprise or employment data for enterprises with fewer than 3 employees.
Employment in micro-enterprises underestimated.